

# INFRASTRUCTURE INVESTMENT LEADS TO SIGNIFICANT ENERGY SAVINGS

When Gundersen Health System needed to replace an aging chiller and three cooling towers, the project team saw it as an opportunity to also save energy. The system, which supplied air conditioning to Gundersen's hospital, was about 40 years old and at serious risk of failing. When the project team researched replacement options, they opted for a chiller, cooling towers and chilled water pumps that were also energy efficient.

While not the original intent of the project, this opportunistic infrastructure investment was one of the health system's biggest energy conservation measures in 2009. It led to a reduction of 800,000 kW hours a year—about 2 percent of the organization's total electricity use—saving the organization about \$70,000 in electricity charges annually.

In addition, the new chiller and cooling towers have added capacity, allowing them to cool more than the hospital. That means duplicate equipment will not be needed for those areas, allowing for additional efficiencies and savings.

Opportunistic infrastructure investment is just one of the many innovative solutions Gundersen's Envision® program is using to reduce energy demand and improve efficiency.

Gundersen Health System is headquartered in La Crosse, Wis., with hospitals and clinics in Wisconsin, Minnesota and Iowa. For more information call (855) 669-1653 (toll free), email [envision@gundersenhealth.org](mailto:envision@gundersenhealth.org) or go to [gundersenenvision.org](http://gundersenenvision.org).

Cooling towers before



A chiller and three cooling towers at Gundersen were at the end of their life and in serious risk of failing. The cooling towers were about 40 years old and had the potential to collapse, which would have left Gundersen with no way to cool the hospital during the summer months.

Cooling towers after



Through an opportunistic infrastructure investment, Gundersen replaced a chiller and the three cooling towers. While not the original intent of the project, the replacements accounted for a reduction of about 800,000 kW hours a year—about 2 percent of the organization's total electricity use and a savings of about \$70,000 in electricity charges annually.